

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): An image displayer having a function of automatically eliminating an afterimage, the image displayer comprising:

a signal processing unit for processing signals and outputting video signals to a display;

a detecting sensor for detecting whether there exists a user within a predetermined range from the display when a still picture corresponding to video signals of an identical pattern outputted from the signal processing unit is displayed on the display beyond a pre-set time; and

a control unit for controlling the signal processing unit to display an afterimage-eliminating picture on the display when a signal corresponding to a non-presence of the user is outputted from the detecting sensor, thereby eliminating the afterimage caused due to the still picture; and

an On-Screen Display (OSD) processing unit outputting to the signal processing unit a pre-set OSD signal indicating that the afterimage-eliminating picture is being displayed on the display, corresponding to a signal outputted from the control unit when the afterimage-eliminating picture is displayed on the display,

wherein, on receipt of a signal indicating that there exists the user within the predetermined range from the detecting sensor, the control unit controls the OSD processing unit to output the pre-set OSD signal to the signal processing unit, thereby allowing the user to select whether to perform an afterimage-eliminating function.

2. (canceled).

3. (original): The image displayer of claim 1, further comprising:

an audio message storage unit outputting a pre-set audio signal to the signal processing unit to output an auditory cue indicating that the afterimage-eliminating picture is being displayed, corresponding to a signal outputted from the control unit when the afterimage-eliminating picture is displayed on the display.

4. (original): The image displayer of claim 1, wherein the control unit comprises:

a still picture detecting portion sequentially comparing the video signals outputted from the signal processing unit by each frame, thereby detecting the still picture in which identical video signals are inputted beyond the pre-set time;

a controller outputting a command to eliminate the afterimage occurring due to the still picture when the still picture is detected and the user non-presence signal is inputted from the detecting sensor; and

an afterimage-eliminating picture storage portion generating and outputting to the signal processing unit a signal corresponding to the command that is inputted from the controller to eliminate the afterimage.

5. (canceled).

6. (currently amended): The image displayer of claim 5~~1~~, further comprising an input unit that allows a user to select whether to perform the afterimage-eliminating function.

7. (currently amended): An image displayer comprising:
a display;
a processor for processing signals to be displayed on the display;
a sensor for detecting a presence or a non-presence of a user within a predetermined range from the display when a still picture is output from the processor and displayed on the display beyond a pre-set time period; and
a controller unit for controlling the processor to display an afterimage-eliminating picture to eliminate an afterimage due to the still picture on the display when the sensor detects the non-presence of a user.

wherein if the sensor detects the presence of the user, the processor displays an on-screen display to allow the user to select whether to perform an afterimage-eliminating function.

8. (original): The image displayer of claim 7, further comprising:
a second processor for outputting an indicating signal to the processor, wherein the indicating signal indicates that the afterimage-eliminating picture is being displayed on the display.

9. (original): The image displayer of claim 7, further comprising:
an audio emitter for emitting audio cues;
an audio unit for outputting audio cues that the afterimage-eliminating picture is being displayed, to the audio emitter.
10. (original): The image displayer of claim 7, wherein the controller unit comprises:
a comparator for comparing the signals outputted from the processor thereby detecting the still picture;
a command generator for outputting a command to eliminate the afterimage when the still picture is detected and the non-presence of the user is detected; and
an afterimage-eliminating picture generator for generating and outputting to the processor an afterimage-eliminating picture signal.
11. (canceled).
12. (original): The image displayer of claim 7, wherein the processor processes signals to be output by an audio emitter.
13. (currently amended): An afterimage-eliminating method of an image displayer having a function of automatically eliminating an afterimage, the method comprising the steps of:

processing signals inputted from an external device and outputting video signals to a display;

sequentially comparing the video signals as outputted by each frame, thereby detecting a still picture in which identical video signals are inputted beyond a pre-set time;

detecting whether there exists a user within a predetermined range from the display when the still picture is detected in the still image detecting step; and

displaying on the display an afterimage-eliminating picture eliminating an afterimage caused, due to the still picture when it is detected that no user exists within the predetermined range,

wherein the step of displaying the afterimage-eliminating picture on the display further comprises a step of outputting a pre-set On-Screen Display (OSD) information on receipt of a signal indicating that there exists the user within the predetermined range, thereby allowing the user to select whether to perform an afterimage-eliminating function.

14. (currently amended): The afterimage-eliminating method of claim 13, wherein the step of displaying the afterimage-eliminating picture on the display further comprises the step of outputting a pre-set ~~On-Screen-Display~~ (OSD) signal indicating that the afterimage-eliminating picture is being displayed on the display when the afterimage-eliminating picture is displayed on the display.

15. (original): The afterimage-eliminating method of claim 13, wherein the step of displaying the afterimage-eliminating picture on the display further comprises the steps of outputting a pre-set audio signal to output a voice message from an audio emitter indicating that the afterimage-eliminating picture is being displayed when the afterimage-eliminating picture is displayed on the display.

16. (canceled).

17. (currently amended): The afterimage-eliminating method of claim ~~16~~13, further comprising the step of selecting, by the user, to perform or not perform the afterimage-eliminating function.

18. (currently amended): An afterimage-eliminating method of an image displayer comprising:

processing input signals to be displayed on a display;

sequentially comparing the input signals;

detecting a still picture when the respective, sequentially compared input signals are identical beyond a preset time period;

detecting whether a user is within a predetermined range from the display when the still picture is detected; and

displaying on the display an afterimage-eliminating picture for eliminating an afterimage due to the detected still picture when no user is detected,

wherein the step of displaying the afterimage-eliminating picture on the display comprises a step of outputting a pre-set On-Screen Display (OSD) information if the user is detected to be within the predetermined range, thereby allowing the user to select whether to perform an afterimage-eliminating function.